REMARKS

In response to the Office Action dated September 19, 2006, Applicant has amended claims 1, 4, 7, 11, 12 and 15 and cancelled claim 14 without prejudice. No new matter is added. The amendments to the claims are for purposes of clarity.

In response to the rejections of claim 14 under 35 USC §101 and 35 USC §112, first paragraph, Applicant respectfully disagrees with the Examiner but the rejections have been rendered moot by the cancellation of claim 14.

With respect to the objections to claims 1, 5, 11 and 12 on the basis of informalities, Applicant has amended the claims to traverse these objections.

With respect to all of the objections under 35 USC §103, the primary reference for all of the rejections is the Biby US Patent No. 4,670,760. In light of the amendments to the claims, Applicant respectfully traverses these rejections. All of the independent claims, specifically claims 1, 11 and 15, have all been amended to make it clear that the power supply or power source is a direct current source. This is critical in comparing the present invention and the antenna system disclosed in Biby. Biby describes a "ground wave" antenna which is attempting to cure problems of interference in surface or ground waves. The Biby antenna is a radiating antenna matched with a series of secondary antennas directed to reduce sky wave interference in ground wave signals. What is critical in Biby is that the antenna is generating waves, something that only comes from using an alternating current or power source. The antenna in Biby is connected to a signal source having a carrier frequency lambda and the height of the antenna is related to that frequency. In contrast, a direct power source such as is described and claimed in the present application has no frequency, so there cannot be wavelength to use as a measure of antenna height.

Thus, there is a difference in kind between Biby and the present invention in terms of the type of antenna and the output from the antenna. The antenna described in Biby puts out a carrier wave with a given frequency while the claimed antenna puts out a stream of ions, not a wave. There is no wave generated by the antenna of the present invention.

None of the other references cure this deficiency. Hoag merely discusses the finding

that radio waves can alter the ionization of the atmosphere, not that a stream of ions can make a change. Kulik merely discusses an antenna with a first and second position but again, it is a radio wave antenna. Ignatius merely discusses the claims made by others to weather control without any indication of the antenna or its construction. Thus, no combination of references discloses or renders the present invention obvious.

In light of the foregoing, Applicant considers that the claims, as amended, are in condition for allowance. Prompt notification of allowance is requested.

Respectfully submitted,

Date: January 19, 2007

(Reg # 54,741) Jeffrey L. Kopaiz for

Name: Ralph A. Loren
Registration No.: 29,325
Customer No.: 29933
Edwards Angell Palmer & Dodge LLP
P.O. Box 55874
Boston, MA 02205
Tel. (617) 239-0100